## Summary of the Joint Meeting of the Program Policy and Structure and the Proficiency Testing Committees February 4, 1997

The Proficiency Testing and Program Policy and Structure Committees then met in a joint session. The meeting was led by Ms. Andrea M. Jirka, chair of the Proficiency Testing Committee, and Dr. Kenneth W. Jackson, chair of the Program Policy and Structure Committee. The purpose of the joint meeting was to discuss the separate committee proposals for the parameters that describe performance testing samples; the Proficiency Testing Committee describes proficiency testing samples in terms of program and analyte, while the Program Policy and Structure Committee describes proficiency testing samples in terms of program, analyte, and method. The following items were discussed:

- Overview of Program Policy and Structure Committee proposal by Ms. Marlene Moore,
- Overview of Proficiency Testing Committee proposal by Ms. Jirka, and
- General discussion of strengths and weaknesses of the two proposed approaches.

## **Overview from Program Policy and Structure**

Ms. Moore presented the approach to preparation of proficiency testing samples developed by the Program Policy and Structure Committee. She first pointed out a difference in terms. The Program Policy and Structure Committee describes the defining parameters as the "scope of accreditation" while the Proficiency Testing Committee describes the defining parameters in terms of the "field of testing." She presented a list of items that affect the preparation of proficiency testing samples. Included were:

- program area,
- group of materials or items to be tested,
- specific tests or types of tests to be performed,
- requirement for use of standard methods, and
- range of testing, equipment, and limits of detection (LODs).

She added that numerous U.S. Environmental Protection Agency (USEPA) programs require that analyses be performed using specified methods, but that others are performance-based, systems-based, or analyte-based. She noted that all these elements must be considered when developing a scope of accreditation (a field of testing).

## **Overview from Proficiency Testing**

Ms. Jirka reiterated the Proficiency Testing Committee's proposal, which is that the field of testing is defined by the program, matrix, and analyte or analyte group. She presented a list of reasons for the Proficiency Testing Committee's proposal, including the following. This approach:

- is less costly because it is performance-based,
- is efficient because samples could be designed to fit several methods,
- will not result in reduction of data quality,
- allows laboratories greater flexibility in selecting methods, especially for difficult samples,
  and
- allows for the use of performance-based methods.

Ms. Jirka noted that many USEPA programs do not have method-specific requirements. When USEPA methods are required, compliance could be determined through an on-site assessment and data review. She acknowledged that the approach proposed by the Proficiency Testing Committee is a compromise but said it provides the best data for the most reasonable price and also allows the flexibility to accommodate future changes such as changes in technology. Ms. Jirka concluded her presentation by noting that the two committees will work together to develop a consensus approach to the proficiency testing sample issue.

## Discussion

There was concern that the Proficiency Testing Committee's approach would result in loss of recognition of acceptable performance by individual methods. Often, the client stipulates the method to be used.

- a. Under the Proficiency Testing Committee's approach, it was felt that the client would no longer be assured that the data were being acquired according to their specifications. In response, it was noted that a laboratory could choose to analyze a proficiency testing sample by the same method required by the client and also analyze another proficiency testing sample using a more generic method for NELAC.
- b. Being able to choose the method is especially important for small laboratories that have limited capabilities. Also, a proficiency testing program that requires different proficiency testing samples for different methods is more costly and, therefore, a greater burden for small laboratories.
- c. A major disadvantage of a laboratory being proficiency tested for an analyte without being method specific is the loss of accreditation for that analyte for all methods through proficiency testing failure.

It was noted that the USEPA has made the decision to move toward performance-based measurement systems. Laboratories will be given greater choice in how to perform analyses and more responsibility for the quality of their data. In the future, the USEPA will continue to reduce the extent of required specific methods. More weight will be given to on-site assessments to verify and document the quality of the data being generated.

Concern expressed was that laboratories will choose their best method to analyze proficiency testing samples but then use simpler, less costly methods to analyze samples for clients. There was general acknowledgment that this situation does occur.

It was noted that the more complex an accreditation program becomes, the less important each piece becomes. Also, increased complication increases costs. Ideally, there would be a proficiency testing test for each method, but designing a program to that level of detail may be unworkable. A balance is needed in order to achieve a functional system that can be successfully administered by the States. Currently, laboratories performing proficiency testing for USEPA programs report only one value for each analyte. The actual method used by the laboratory is generally not known. This would be an even greater problem with 50 States in the NELAC program. There is no way that such a large program could be administered without being generic. The intention of NELAC is to demonstrate a capability. The objectives of NELAC should not be confused with project-specific data quality objectives (DQOs).

It was noted that if a laboratory wants to demonstrate proficiency with a particular method, nothing precludes that laboratory from demonstrating that the method tested using NELAC proficiency testing samples and the laboratory's particular method are comparable. This could be done through analysis of split samples. NELAC accreditation is intended to indicate a general high-quality performance. NELAC is one indicator of overall capability. It does not address the need for project-specific quality control (QC), or DQOs.

The matter of different programs requiring specific methods was discussed. It was generally acknowledged that some specific methods may have to be used in certain programs and that each specific method may have to be subjected to proficiency testing. For example, most States require analyses of drinking water samples using both gas chromatography (GC) and gas chromatography/mass spectrometry (GC/MS). This requires two sets of proficiency testing samples, which can prove to be financially burdensome for most laboratories. The cost of additional complexity must be weighed against the potential benefits.

It was noted that proficiency testing is only one component of a process to evaluate the quality of a lab's capability. Proficiency testing is not the primary means of such an evaluation. The on-site audit and the standards of Chapter 5 are major components in such an evaluation. It was noted that it is easier to set up a measurement and scoring system than to set up a meaningful laboratory audit program. Good methods for scoring on-site audits are not currently available. Most States depend heavily on proficiency testing results to define the capability of the laboratory.

It was then requested that those present refocus on the main issue, which was whether the Proficiency Testing Committee's position is compatible with the Program Policy and Structure Committee's position. It was noted that some combination of the two proposals would result in compromising data quality but also in increasing flexibility. A poll was taken to determine the preference of those present. The results were as follows:

Program/analyte/method: 1 vote Program/analyte/matrix: 16 votes Some combination of both: 18 votes

The discussion ended with the note that both committees welcome verbal or written input.